

has undertaken to carry out the work of eradicating this colony. Mr. Giffard considered that the area had not been infested for a greater time than six or seven months.

NOVEMBER 6th, 1919.

The 170th meeting of the Society was held in the usual place, Vice-President Crawford in the chair. Other members present: Messrs. Bridwell, Bryan, Ehrhorn, Pemberton, Potter, Rosa, Swezey, and Timberlake.

In the absence of the Secretary, Mr. Bridwell was appointed Secretary pro tem.

Minutes of previous meeting were read and approved.

A Committee was appointed to prepare an additional list of common names for Hawaiian economic insects. Messrs. Timberlake, Pemberton, and Bridwell.

PAPERS.

Some new Hawaiian Coleoptera.

BY DR. R. C. L. PERKINS, PAIGNTON, ENGLAND.

(Presented by Mr. Swezey.)

This paper deals with a small consignment of beetles belonging to the Longicorns of the tribe Plagithmysini, and to the family Proterhinidae, recently sent to me for determination and description by Messrs. O. H. Swezey and J. C. Bridwell. The type specimens of the new species in this lot will be deposited in the collections of the Hawaiian Entomological Society. In addition to these I have described a few new species of *Proterhinus* of my own collecting which I had occasion to examine in the course of working out the others. The types of these are in my own collection.

The specimens sent had been collected with great care and in nearly every case the trees or plants on which they were found had been carefully noted. This is of great importance

in the case of the Longicorns, but even more so in that of the excessively difficult genus *Proterhinus*, for without such data one may well despair of arriving at any definite conclusion as to the validity of many of the species, the variation often being excessive and the distinguishing characters very slight and difficult to appreciate. At present I am myself left with a collection from all the Islands of hundreds or thousands of undetermined or dubious, though well-mounted, specimens. If it were possible for me to receive other such consignments, carefully collected with data, I should hope to be able after a time to revise the whole genus, and possibly to make some such tabulation of the species as would facilitate their identification. As might have been expected, some of the species formerly described by me are now known not to be distinct, while others once thought to be confined to one Island, I have subsequently taken on others. Some of the earlier species contained more than one form under the same name. In my collection these mistakes have been mostly rectified, but I have not had the opportunity of making the same corrections in the other collections. In this paper, I have not dealt with such matters to any considerable extent, as it has been advisable to complete the descriptions of new species and return the specimens as quickly as possible, because all my collections have to be packed up for an almost immediate removal to a new address.

I would urge those, who are fortunate enough to have the opportunity of collecting further specimens, to aim at getting together a smaller collection of specimens with accurate notes as to food plants and other data, rather than a much larger one collected at random, though the former method occupies much more time. I feel sure that it is only from careful collecting of specimens that really definite results are to be expected. In examples collected at random one can always pick out certain species, as obviously distinct, but a large amount of the material will remain dubious or undetermined. At most one can say that specimens without careful notes as

to food-plant, etc., are better than nothing. Casually collected examples in indifferent condition are almost valueless.

CERAMBYCIDAE, *PLAGITHMYSINI*.

Nesithmysus gen. nov.

This name is proposed for a large species of the *Plagithmysini*, with a much wider prothorax than that of *Plagithmysus*, this part being hardly less wide in the middle than the base of the elytra. The latter are long, less pointed or cuneate than in *Plagithmysus*, and the wings in repose are shorter, so that the tips which are bent inwards, can be almost, if not quite, covered by the elytra. Owing to the length and form of the wing-cases, the insect has a heavy and less elegant facies than that of the other genus. The pronotum has a median crest well elevated in front and behind, the ridges on either side of this are represented by black callus lines elevated into strong tubercles posteriorly. The second and following joints of the antennae have only very sparse fine hairs. The hind femora have a well-marked apical club, very similar to that of some species of *Clytarlus*. The hind tibiae and tarsi are only thinly clothed with hair and differ greatly in this respect from normal *Plagithmysus*. The elytra have no definite pattern of markings, being clothed with extremely minute pubescence, but at the extreme base between the scutellum and the shoulders there is an indefinite area clothed with longer and denser yellow hair.

Obs. I do not think it possible to retain this insect in either of the two genera referred to above, but it is more nearly allied to *Clytarlus* than to the other. Dr. Sharp has already pointed out that certain species described by him, having intermediate characters, are placed with difficulty. At present, I find it convenient to assign to *Plagithmysus* all those species which closely agree in the dense clothing of the hind tibiae and tarsi, although this causes some changes in the arrangement adopted in the "Fauna Hawaiiensis". This plan will throw into *Clytarlus* some species now included under *Plagithmysus*, but which in general facies seem to agree better with the former. I have alluded to this matter because one of these troublesome forms is described below.

Nesithmysus bridwelli n. sp.

Ferruginous or rufescent; the head black, thorax beneath largely black or dark. A stripe on the median crest of the pronotum (varying in

width), one on each side of this, not reaching either the front or hind margins, and ending in a bifid dilatation at the posterior tubercles, a small spot on each side at about the middle of the length of the pronotum, black. More or less of the scutellum, the extreme tips of the femora and the apices of the hind tibiae (at least beneath) are also dark. Face beneath the antennae with yellow hair, an indefinite pubescent patch of this color at the base of each wing-case and a spot at either extremity of the mesopleura; breast with pale flavescent pubescence. Sides of abdomen with minute appressed pubescence and closely punctured, the general surface between these shining, sparsely punctured and clothed with erect, fine hairs. Fifth ventral segment excised at the apex in the middle.

The pronotal crest is much more pointed in front in one example than in the other, but such variation is common in *Plagithmysus*. The individuals examined have the appearance of being females, but the sex is not certain without dissection. Length, 22-24 mm.

HAB. Oahu, Mt. Kaala; one on ohia lehua July 4, 1916 (O. H. Swezey); one on July 22, 1917, on *Broussaia* (J. C. Bridwell). Described from these two examples.

***Plagithmysus swezeyi* n. sp.**

Head, pronotum and breast red, elytra black. Legs black or nearly so, but the femora are red on the basal portion, more yellow in the case of the hind pair, where the pale portion occupies about half their length. Antennae dark brown or blackish fuscous. Hairs of the hind tibiae and tarsi dark. Face with minute white hairs (perhaps abraded), labrum and the adjoining part above with yellow setae. Pronotum with a narrow snow-white band on either side of the median crest, the bands not dense, and a trace of a small white spot on the middle of the densely punctate sides. Elytra shining, roughly punctured on the basal portion and with small spots (not closely placed) of snow-white hairs; on the posterior half the spots are placed in a line on either side of the suture and become minute towards the apex; the spots are mostly much separated from one another. Mesopleura with a dense white spot in front and behind. Hairs of the hind tibiae and tarsi dark. Length, male, 15 mm., with the exposed tips of wings.

This very elegant species belongs to the *vitticollis* group, and should be placed next to *P. longulus* (which will probably prove distinct from *P. vitticollis*). It is readily distinguished by the red head and pronotum and the two narrow snow-white pronotal vittae. The female will very likely have a smooth impunctate area on the sides of the pronotum.

HAB. Hawaii, Niuli. A single male, captured May 19, 1917, by Mr. Swezey, is the only example I have seen.

Plagithmysus platydesmae n. sp.

Head and usually the thorax black, but the latter may be pitchy or reddish down the middle. Elytra brown or yellowish brown at the sides and usually on the basal portion in front of the median black-pubescent area. On the middle portion from the base of the furcate lines to the tips they are darker, generally nearly black or dark brown. In one example the dark part occupies all the middle right up to the base, only the humeral section of the base being brown. Antennae dark, the scape more or less red, and the following joints sometimes also red-tinged. Femora red, black at the apex.

Face densely clothed with yellow hair, the pronotal vittae dense, yellow, usually broad, the lateral ones occupying the whole deflexed sides, except that they enclose or are deeply divided by a glabrous strip. Elytra with a deep black tomentose spot across the suture towards the base (as in the other members of the *bishopi* group), in front of this with by no means dense, yellow hairs, and more or less roughly punctured; the longitudinal lines furcate, of dense yellow hairs and with a feeble line of the same color produced backwards from the tip of the furcation on each side. On the apical portion of the elytra the punctures become obsolete or subobsolete. Mesopleura with a continuous, or almost continuous, band of dense yellow hair, and the abdominal segments with a dense band of the same color, broken into spots if the segments themselves are greatly distended. Hind tarsi with dense white hairs. Breast beneath with a yellow band reaching from the front to behind the middle coxae. Length, 13-18 mm.

One example, which is certainly a female, has the glabrous area enclosed in the band on the side of the pronotum highly polished to a large extent; but another, which, from the appearance of the abdomen, is also of that sex, has it dull, and densely punctured, as in the male.

Most like *P. collaris* of Maui, but with totally different pronotal ornamentation, and with the apical portion of the elytra much less definitely punctured.

HAB. Hawaii, Glenwood (March 2, 1919, Swezey). Seven examples bred from affected wood of *Platydesma campanulata* brought down from this locality to Honolulu. The description is drawn up from these examples. All the other members of the *bishopi* group are known to be attached to *Pelea*, which is placed next to *Platydesma* in Hillebrand's "Flora". *P. bishopi* was bred by me from *Zanthoxylum* (also an allied tree) as well as from *Pelea*.

Plagithmysus elegans Sharp.

I possess the female of this species. It does not seem to

differ in any important manner from the male described by Sharp.

***Plagithmysus giffardi* Perkins.**

I think it possible that there were two species contained in the eight examples on which *P. sulphureus* was originally described. Most of the examples taken were found on *Urera*, in which tree it was breeding; some had to be kept alive in order to become mature. Two or three specimens, however, were captured on the wing in a slightly different locality and it is possible that these were the same as the form I subsequently described as *P. giffardi*. Both in the diagnosis and in the English description, Dr. Sharp refers to the "rufescent" or "fulvotestaceous" area at the base of the elytra, and this accords with my recollection of the specimens obtained on *Urera*. The figure in the "Fauna Hawaiiensis" does not show these markings and may have been made from one of the examples taken on the wing and likely to be *giffardi*. In the remarks on variation, Dr. Sharp refers to a reduction of the black color, but not to its extension in any of the specimens. Although I have in the past had many specimens of *giffardi*, and still have a score left, I have seen none with the elytral markings of *sulphureus*. All the former were from *Myrsine* (now known as *Suttonia*).

***Clytarlus indecens* n. sp.**

Head and pronotum dull red, sometimes nearly entirely suffused with black, the femora not much different from these in color, generally of a browner tint; hind tibiae more yellow, paler than the femora, distinctly dark on about the apical third or fourth. Antennae for the most part testaceous, and nearly concolorous with the elytra. The general appearance is that of *C. modestus* Sharp, but under a moderate lense the pronotum and elytra appear glabrous, while under a compound microscope it is seen that a short seta springs from each of the elytral punctures. There is no pattern of any sort formed by pubescence and the elytra are densely, somewhat strongly, rugulose punctured, the sculpture distinct even at the sides and on the apical portions. Two slightly raised parallel lines extend from the base to beyond the middle of the wing-cases, and another pair outwardly and parallel to these from the neigh-

borhood of the shoulders. The hind femora are thin at the base and then gradually dilated to near the apex, quite unlike normal *Clytarlus* and in fact much more like true *Plagithmysus*. They are less like those of the former genus than are those of the abnormal *P. immundus* Sharp (F. H. III, 646). The hind tibiae and tarsi are very inconspicuously hairy (see remarks above under genus *Nesithmysus*). Length, 7-10 mm.

Obs. All the typical *Clytarlus*, as at present known, are attached either to *Acacia koa* or to *Sophora chrysophylla* and although many *Plagithmysus* feed on these, others affect most varied plants. Those species of *Clytarlus* which are not attached to the *Acacias* are abnormal in structure and will probably be separated generically from either genus in the future.

HAВ. Oahu, Mt. Kaala; one example (the type) collected by H. T. Osborn, Sept. 7, 1913; three examples bred from dead stems of *Smilax* (July 9, 1916, Swezey). The description is mainly drawn up from the type and best preserved specimen. The other three examples all appear to have died before becoming properly mature and are not in good condition, though easily identifiable.

PROTERHINIDAE.

Proterhinus swezeyi n. sp.

A large species with the surface of the pronotum and elytra very uneven and the erect setae very long, numerous, and conspicuous. Reddish fuscous, some parts (e.g. the humeral parts of the elytra) being more red, others more obscure in color. Legs and antennae red, the former of paler color than the latter.

Rostrum of the female short, hardly longer than its greatest width, eyes well-developed and extremely prominent, not differing much from those of some examples of *P. deinops*, but the head has not the strong transverse constriction of the latter. The rostrum is not polished in the middle, but minutely sculptured there, and the grooved lines on each side of this owing to the sculpture towards the sides being longitudinally rugose do not stand out distinctly. Antennae slender and of good length; the scape elongate triangular, and stout; the club slender, 3-jointed, its basal joint elongate and by no means wide, but being much wider at the apex than the preceding joints, the club as a whole is well-marked. Pronotum strongly and suddenly narrowed anteriorly, the constricted part longer than in most species, with a large round fovea or impression on each side behind the constriction, the part between the foveae sub-

impressed, so that two more or less evident ridges are formed between this impression and the lateral foveae in some aspects. Elytra with the humeral angles produced or subacute, and with a distinct, densely setose tubercle on either side of the scutellum, the space between these tubercles and the humeral angles strongly impressed. The mid-dorsal portion of the elytra, for about two-thirds of their length, is flattened, but uneven, bare and depressed areas occurring amidst the squamosely clothed surface. The flattened area forms at its junction with the decurved sides a pair of uneven longitudinal ridges, each terminating posteriorly as a raised tubercle, owing to the apical portion of the elytra being of simple convex form. The squamous covering of the pronotum and elytra is of a greyish golden color and is dense, but unevenly distributed, so as to form maculations on the elytra. The erect setae are very long and spiniform, as also are those on the legs. The lobes of the tarsi are of moderate size. The punctures of the basal abdominal segment beneath remain coarse and distinct on the middle part. Length, female, 5 mm.

HAB. Oahu, Mt. Olympus (near Honolulu), Sept., 1917. A single female of this interesting and beautiful species was obtained by Mr. Swezey from the native palm, *Pritchardia martii*, an uncommon tree on Oahu. In some respects it appears to be a connecting link between the *blackburni* group and the other members of the genus.

***Proterhinus euops* n. sp.**

Head and thorax of a sordid red, or reddish black, quite red if somewhat immature; the elytra red and black, as a rule extensively dark with the sides, base and apex more red, and the dark area containing red spots. The antennae are somber red and the legs much paler than these or ferruginous.

Pronotum with almost even clothing of golden squamosity, which is not very dense, but with a small distinct dense spot, often nearly white at the hind angles. The elytra are maculate, the pale parts bearing golden and whitish squamosity or appressed setae, the dark areas being bare, while the erect white setae are of moderate length, numerous, and very conspicuous on the posterior parts.

Head with large, outstanding, subconical eyes; strongly constricted behind these, so that an evident transverse ridge is formed. Antennae rather long, with slender three-jointed club, the ninth joint being considerably wider at the apex than the eighth. Rostrum of female shining, the punctate grooves distinct. Pronotum and elytra formed exactly as in some large examples of *P. gracilis* Sh., the former constricted in front and there impressed in the middle, the two impressions or foveae behind this very distinct. Elytra long and narrow, nearly parallel-sided until they become rounded off to the apex, the humeral angles acutely

produced, the tubercles near the scutellum covered with dense appressed pale setae and very conspicuous. The punctures are close, coarse and distinct. The basal abdominal segment beneath has the punctures distinct on the middle portion, but they are not close nor coarse on that part. Length, 2.75-3.5 mm.

HAВ. Oahu, Mt. Kaala (July 9, 1916, O. H. Swezey). Twelve examples, one or two being immature and newly emerged, on *Euphorbia*.

***Proterhinus euphorbiae* n. sp.**

A red species, the thorax and head often more sordid, the elytra with dark (black or fuscous) spots. The club joints, or at least the two basal ones, usually appear dark compared with the preceding joints of the antennae. The clothing of the insect consists of golden squamosity (fading, no doubt, to whitish) while the elytra bear also conspicuous white erect setae, which are quite numerous on the apical portion.

Head without a raised transverse ridge or constriction behind the eyes, which are only of moderate size. The antennae are very slender (more so than in the preceding) with distinctly 3-jointed club. The rostrum of the female is very smooth and shining, with the punctate grooved lines extremely fine, though more developed in one example than in the others. Pronotum not at all wide, the three impressions distinct, but varying to some extent, the hind angles are rendered distinct by a condensation of the squamous covering, so as to form a pale spot at that point in dorsal aspect. Elytra long, arcuately emarginate at the base, so that the humeral angles are acutely produced, the golden squamosity absent from the dark spots or markings, which are chiefly placed about the middle or on this and the hind part of the surface. The basal abdominal segment is coarsely punctured even on its middle portion. Length, female, 2.5-3 mm.

This species is I think evidently allied to *P. robustus* and the variable *P. heterostictus*, which are both found in the same neighborhood, though the former (as well as the latter) is now known to me to occur also in the Koolau Range. *P. robustus* is distinguished at once by its antennal characters. *P. heterostictus* differs from the species now described in its less narrow and elongate elytra, different pronotal structure, etc. *P. euphorbiae*, though found with *P. cuops*, is not at all closely allied to it, the elytra are only obsoletely tuberculate on each side of the scutellum, or at least the tubercles are not rendered prominent by a special clothing as in the other, and the punctures are much less gross.

HAВ. Oahu, Mt. Kaala (July 9, 1916), three females; the same but on the west side (June 1, 1919), two females

evidently older. All were taken from *Euphorbia* and the male was not procured (O. H. Swezey).

***Proterhinus impressiscutis* n. sp.**

A red or ferruginous species with a dark elongate marking on each side of the elytra near the middle of their length. The appressed clothing is golden in fresh examples at least, the head and pronotum being densely clothed. On the elytra a not very distinct stripe, appearing slightly paler, extends from each humeral angle, these stripes being convergent; erect white setae are quite evident along the side margins and on the posterior part of the wing-cases, but they are sparse and short.

Rostrum of the female polished and elongate, about twice as long as wide, and with the impressed punctate lines very distinct and well-marked. Antennae entirely red, slender, with 3-joined club. Eyes small. Pronotum as wide or wider in the middle than the width of elytra at their base, and with the anterior foveae not deep, less evident in a well-clothed example than in a partially denuded one, and rounded at the sides, with little or no appearance of a constriction anteriorly; the posterior foveae are obsolete or indistinct. Elytra subcuneate, the humeral angles distinct, owing to the obliquity of the basal margin of each wing-case, the scutellar region occupied by a deep fovea. Punctures in some aspects very distinct and definite, and not dense. Basal abdominal segment beneath shining, distinctly, but not closely, punctured in the middle, the sternum coarsely punctured. Length, female, *cir* 3 mm.

HAB. Oahu, Mt. Kaala (July 4, 1916); described mainly from a single female captured by Mr. O. H. Swezey on *Euphorbia*. I have once or twice captured single examples that appear to be this species, in the same locality, but without note of food-plant. These specimens are covered with exudation, which I have at present been unable to clean off satisfactorily.

***Proterhinus bridwelli* n. sp.**

A red species, the head and pronotum more sordid or rufofuscout, rostral portion of head black. In some aspects and lights the antennae are entirely red, in others they appear largely dark (male). The elytra have a vague dark marking near or behind the middle on each side. The clothing is golden, the elytra bearing some white spots chiefly on the apical portion and there are a very few short white erect setae on them posteriorly. Eyes prominent, but not large. Antennae with very short globose second joint, the club very definitely 3-jointed, its basal joint being very large compared with the preceding and its apex seen at the widest is hardly less so than that of the following joint. The joints preceding the club are short and submoniliform. Pronotum only

slightly impressed in front and without any strong constriction, the foveae hardly visible, the clothing denser along the sides. Elytra at the base as wide as the pronotum, the humeral angles not sharp, but fairly distinct, the punctures on the basal portion dense, distinct in some aspects and tending to run into one another. There is hardly any impression between the scutellum and the humeral angles, the elytra being of simple form and short, about one and a third times the length of the pronotum. The basal abdominal segment beneath has the punctures on the middle portion very feeble or obsolete. Length, male, 2.5 mm.

HAB. Maui, Iao Valley, Sept., 1918, on *Euphorbia hookeri integrifolia* (J. C. Bridwell). Described from a single male. When I first examined this species it reminded me of the very differently colored (black) *P. breviformis* of Lanai, but on comparing the two, I find the differences of structure (antennal joints, pronotum, etc.) so great that they do not appear to be closely allied.

***Proterhinus asteliae* n. sp.**

A red species, with the antennae entirely red, the head and pronotum with golden squamosity (fading to white); the clothing of the elytra broken up into lines or spots, being variable in extent, so that they are prettily maculate, the bare parts being often black or dark, but sometimes red. Remarkable amongst the species with simple humeral angles to the elytra for the great length of these. The color and maculations resemble those of *P. pteridis*, but that is a still narrower insect, with totally different antennae.

Antennae of moderate length, about three-fourths the length of the elytra, appearing rather short from the elongation of the insect. Second joint as long or longer than the fourth and much more robust, basal joint of the club much less wide at the apex than the second, but notably longer and wider than the last funicle joint. Rostrum of the female very polished, and the punctate lines very feeble. Pronotum somewhat narrow, usually appearing considerably less wide than the widest part of the elytra, the posterior impressions not deep and sometimes obsolete. Elytra twice or even more than twice the length of the pronotum, and about twice as long as their width at the base; they have coarse, deep punctures, generally appearing to form rows on a large part at least of the surface. The erect setae are short and sparse, white, and in dorsal aspect will be noticed on each side of the suture towards the apex. Basal abdominal segment with the punctures feeble or obsolete. Length, male and female, 2.5-3 mm.

HAB. Oahu, Mt. Kaala (July 4, 1916); fourteen exam-

ples (O. H. Swezey). Mr. Swezey informs me that the larvae are miners in the lower part of the leaves of *Astelia revatroides*.

***Proterhinus abnormis* n. sp.**

Red, the elytra with black markings, sometimes almost wholly black. Head rarely black. Antennae red, the club sometimes black. The appressed clothing is of a golden color. The female head is like that of a male, there being no development of the beak such as is usual in the former sex of the genus. Beak short, transverse or at most almost square in outline, the eyes strongly convex, but not large; the antennae with the second joint longer and much stouter than the fourth, second joint of club much wider than the first and in some aspects the club appears almost as only 2-jointed, though its first joint (i.e. the 9th antennal joint) is really both longer and evidently wider than the 8th.

Pronotum with three depressions, the hind ones sometimes feeble (liable to be concealed by excretions), its sides rounded, but the curves are suddenly interrupted in front, so that the anterior constriction is great or considerable; the golden clothing is fairly evenly distributed, but the bottom of the anterior fovea is often bare. Elytra usually with a conspicuous black or dark area on each side about the middle, but in one specimen the black is much more extensive, leaving only the basal margin and some spots on the apical third pale. They are prettily variegated in pattern, owing, in general, to the absence of the golden clothing from the darker parts. The short pale erect setae are very sparse and not conspicuous, chiefly noticeable at the sides and on the apical portion. The surface of the elytra is more or less uneven, some parts being slightly raised. This is especially noticeable on the pale spots which form a transverse (often broken) band on the posterior third, these being evidently raised. There is often a vague oblique ridge behind the shoulders and traces of other inequalities of surface. The humeral angles are distinct and generally subacute or subrectangular, the elytral punctures coarse.

It may be noted that there is usually a fine median longitudinal carina on the rostrum, but it is sometimes only visible in certain aspects and sometimes, perhaps, wanting. Length, male and female, 1.75-2.25 mm.

HAB. Oahu, Mt. Kaala (Sept. 7, 1913, and July 9, 1916); on *Broussaisia*, the larvae are miners in the leaves (O. H. Swezey). Described from 11 examples.

***Proterhinus phyllobius* n. sp.**

This species is allied to the preceding, the female having only a short beak like that of the male, and lacking the usual characteristics of this organ as exhibited by the females of all other species. The color is very variable between entirely black and entirely red, except for a dark area

on each side of the elytra. The legs and antennae are always red, though 2 or 3 of the apical joints of the latter are sometimes somewhat infuscated.

It differs from the preceding in the elytra being narrower, without the uneven surface described above, in their different clothing which is much less developed, so that these generally appear nearly bare and shining except for minute setae, and the pronotum also is much less closely covered. This species would be difficult to distinguish from worn examples of various other more obscure members of the genus, were it not for the similarity of the rostrum in both sexes, so that while it never resembles the female of any other species, it differs from most males by the greater length or more definite character of this organ. Length, male and female, 1.6-2 mm.

This species is mainly described from a series of 13 examples given me by Mr. Swezey some years ago, which were cleaned and mounted by me when newly captured. Others taken with these were dissected at the same time. In addition to these, I have used well-mounted examples taken casually at an earlier date without note of food-plant, these having remained unnamed, as being doubtfully distinct from some described species. I have more superficially examined a series of 30 examples mounted on points and collected by Mr. J. C. Bridwell.

HAВ. Oahu, in the mountains near Honolulu. This species was found by Mr. Swezey to have the abnormal habit of mining the leaves of *Broussaisia*. Mr. Bridwell's examples were collected on Kaunahona, July 23, 1916.

***Proterhinus fuscicolor* n. sp.**

A dark pitchy brown or pitchy black species, the pronotum generally, the head often and sometimes the base of the elytra with an obscure red tint. An elongate species of the group of *ferrugineus epitretus* and *detritus*, but very distinct by its sordid color.

Antennae appearing rather short compared with the length of the whole insect, between two-thirds and three-fourths the length of the elytra, red, the club joints often appearing more or less dark. Rostrum of the male shorter along the sides than the width, of the female elongate, not polished but rugulose, so that the punctate grooved lines are obscured, or more or less effaced. Pronotum narrow compared with the elytra, conspicuously and definitely narrowed in front, the golden clothing not dense, so that the rough sculpture is easily seen, the sides

with outstanding curved setae quite conspicuous; the posterior foveae or impressions sometimes indistinct, sometimes entirely wanting.

Elytra long, sparsely clothed, so that the coarse close punctures are easily seen, the clothing consisting of very minute setae, and of longer erect pallid ones, these also being short. Humeral angles distinct and produced, the tubercles at the base, on each side of the scutellar region, are very little developed, but their position is rendered evident by a condensation of clothing on their surface, forming a pair of small but noticeable spots, distinct from the general vestiture. The femora, and tibiae may be either red or dark. The basal abdominal segment is distinctly punctate on the disc, microscopically sculptured between the punctures. Length, male and female, 2.5-3.5 mm.

HAB. Maui, Haleakala (August 29, 1918, Swezey); described from 26 of the 27 examples captured on the dead leaves at the bases of the rare and very local Composite plant, *Argyrorhaphium virescens*, growing in a small canyon a little above Puu Nianiau.

***Proterhinus cuneatus* n. sp.**

Head and thorax obscure red, with golden clothing, the elytra red with the covering whitish, this being nearly uniform except on the black spots, which are bare and situated mostly near the middle of the wing-cases. The elytra are widest at the base, the sides almost straightly converging from the shoulders.

Most like *P. molokaiensis*, probably an even rather larger species, with long antennae, but at the same time the elongate funicle joints are much stouter than is usual in the genus and rather resemble those of the species just named.

Eyes large and very convex, the head strongly constricted behind them, so that a strong ridge is formed there, though less evident in the middle. Scape of antennae long and robustly subtriangular, the second joint elongate, as long as the fourth and much stouter, all the funicle joints elongate, the seventh antennal joint being twice as long as its apical width and the eighth very much longer than wide. The rounded sides of the pronotum are set with quite conspicuous curved setae and very greatly narrowed anteriorly; the anterior impression is very large and though deep is vague, the posterior pair are roundish, very deep and distinct. Humeral angles of the elytra very strongly produced, the tubercles on either side of the scutellum also produced, but less strongly, and bearing a spot formed by whitish setae; the punctures are deep but not at all dense on the basal portion of the elytra. The erect setae are white, long and slender, very conspicuous, being more numerous than usual. Femora dark, the tibiae red, tarsal lobes not large for the size of the insect. Length, male, 4.5 mm.

HAB. Maui, Haleakala, about 4000 feet. I have seen only one example, the type, in my own collection. It was collected many years ago and is in beautiful condition. Apart from the structure of the head and important differences in the antennae, the specimen greatly resembles some examples of my series of *P. molokaiensis*.

***Proterhinus malespretus* n. sp.**

Black or blackish fuscous, a small basal and apical portion of the elytra seem to be red, when closely examined, but the color variation is unknown, as the specimen (male) is unique; the squamous covering is golden. Antennae red, the more apical joints appearing black or almost so.

Eyes fairly large, but not at all strongly convex or prominent as compared with many species, the head not constricted so as to form a transverse ridge. Antennae in no way remarkable, the funicle joints are more or less elongate, the apical ones not at all moniliform; the fifth antennal joint notably longer than the sixth. Pronotum nearly round in outline, with the three impressions distinct, the clothing nearly evenly distributed, but with a small whiter patch just in front of each of the posterior foveae. Elytra arcuately emarginate at the base, so that the humeral angles are very distinct or subacute; at the base in the middle (as is easily seen in lateral aspect) they rise up in a strongly convex or oblique manner for a short distance, when the suture becomes slightly raised or prominent. The golden squamosity is distributed over most of the surface and the white elongate, erect setae, though not very numerous, are extremely conspicuous; the punctures on the median portion are not close. The form of the elytra is somewhat short, the base being wide. Length, male, 2.25 mm.

This species appears to me to be quite distinct. Superficially it resembles some examples of *P. squamicollis* as nearly as any Oahuan species, but it may be more closely allied to the *restitus*, *robustus* group.

HAB. Oahu, Waianae Mts.; a single male (the type) was collected by me in the winter months (probably January) of 1903 and has been set aside as new in my collection for many years.

***Proterhinus longisetis* n. sp.**

Only a single female of this species has been examined. The head is black, the pronotum obscurely red, being very much suffused with

black, the elytra except for dark spots, the tibiae and more than the basal half of the antennae distinctly red. Squamosity of head and pronotum golden, the latter with large and dense lateral patches of whiter color. Elytra partly abraded, apparently with golden clothing, but with a broadish white stripe extending back from each shoulder to the apex, and with the white erect setae very slender, long and conspicuous on the posterior part. The setae of the hind tibiae are also slender and elongate, but not so long as the longest of those on the elytra. Rostrum shining, with the punctate lines very fine, the head simple without transverse constriction behind the eyes. Antennae rather long, slender, funicle joints all more or less elongate, not at all moniliform. Pronotum strongly rounded at the sides, much narrowed in front and deeply impressed there, the posterior impressions wanting or at least very feeble. No erect fine setae on the pronotum such as are seen in *P. leptothrix*. Elytra almost simply convex, very slightly emarginate at the base, but with distinct humeral angles, which are practically rectangles, the sides are slightly rounded so as to be a little wider about the middle than at the base, but even at the widest part they hardly exceed the pronotum (at its middle) in width. Length, female, $\tau\tau$ 3 mm.

HAB. Oahu; a single female taken by me in the part of the Koolau Range that is connected with the Waianae Mts. by an elevated plateau. The fine elytral setae remind one of *P. leptothrix*, but that species cannot be at all closely allied.

***Proterhinus ater* n. sp.**

A black or almost black species, with long dark, almost unicolorous antennae, the scape large and unusually long in the male, almost like that of the female. Clothing golden, the elytra largely bare and black, the squamosity forming maculations. Belongs to the species with simple humeral angles and is allied to the variable *P. similis*.

Eyes not at all large, rostrum of female polished and with the grooves distinct. Scape thick and long, rather stouter in the male, but about equal in length to that of the female; second joint longer than wide and stouter than the following ones, which are all elongate, the antennae after the two basal joints, have an unusually slender appearance. The length of one of them in the male is just about equal to that of the elytra. The anterior impression of the pronotum is always present, but the posterior pair are very faint or not noticeable at all in dorsal aspect. The squamosity forms a dense patch on each side of the pronotum. Lobate joint of the front tarsi distinctly small. Elytra of quite simple form, often noticeably flattened or subdepressed on the dorsum, the pale erect setae very conspicuous on the posterior part and in quite unabraded examples with a regular row of almost similar ones

along the whole sides. Front and hind femore extremely stout. Length, male and female, 2.5-3 mm.

This species comes rather close to some extreme forms of the Kan examples of *P. similis*, and I am not sure that in the past I have not actually taken it, or a very closely allied form, in that district, but probably these were referred by me to *similis*. At the present moment I am only able to put my hand on one specimen of this extreme form that approaches *ater*, and it is easily distinguished by the shorter scape (male). Its color is red to a large extent, but probably it would vary to black, so that no importance can be attached to this.

HAB. Kona, Hāwāii, 3000 feet. I have in my collection half a dozen very good specimens of this species and one of the males is taken as the type.

The following species sent in this consignment are, in my opinion, the same as ones previously described by me:

***Proterhinus vestitus* Sharp.**

Five examples of this polyphagous species from *Ipomoea bona-nox*, taken by Mr. J. C. Bridwell. It breeds in *Aleurites*, *Pisonia*, *Charpentiera*, *Pipturus*, *Dracaena*, etc. One batch of specimens which I bred from *Pipturus*, though fully mature, remained entirely red with no black markings, but usually the examples from *Pipturus* are quite like those from other trees or plants.

***Proterhinus subangularis* Perkins.**

Twelve examples of this common and widely distributed species were taken at Pūnāluu, Oahu, by Mr. Bridwell on *Straussia*. It is very doubtful whether *subangularis* and *obscuricolor* are distinct species, or even worthy of varietal names; *angularis* and *deplanatus*, at any rate in the typical form, seem more distinct, but their specific value is dubious. All are attached to *Straussia*, almost if not quite exclusively. Some colonies of each of these forms are fairly constant, others yield very aberrant examples amongst the normal ones.

Proterhinus antiquus Perkins.

A single example taken by Mr. Swezey on Mt. Kaala in company with *P. abnormis*, described above. It is in poor condition, but I have several from Kaala that are much better in this respect, one being very fresh. I cannot separate these from some specimens of the Kanai *antiquus*. The individuals captured by me were taken casually, but certainly not on *Broussaisia*. There is also a closely allied and apparently new species in the Koolau Range, but I should like to see more examples than those I have collected.

Proterhinus deceptor Perkins.

Two small and fresh examples; one taken by Mr. Bridwell on the coral plain at Ewa from *Euphorbia*, and one taken by Mr. Timberlake on Diamond Head from *Lipochaeta*, agree excellently with minute examples of a large series bred by myself from *Gossypium*. In the latter series were examples twice or thrice the size of the smallest ones. Other series have been obtained from the hau and various other trees.

Fourteen examples from Kilauea, Hawaii, found by Mr. Swezey on the rare tree *Hibiscadelphus Giffardianus* belong to the form var. *major* (hardly to be separated from var. *kouanus*). They differ much in size and somewhat in other respects from the minute examples mentioned above, but with series from different islands and taken from different plants I am unable to split up the species.

Proterhinus excrucians Perkins.

An example of the smaller, narrower variety of this most difficult and variable species is in poor condition. It was captured on the lowlands (on the Ewa coral plain), on *Sida* by Mr. Bridwell, and differs in no wise from some of the depauperated examples taken in the mountain forest above Honolulu.

Proterhinus obscurus Sharp.

A male of the darkest variety of this variable species was

captured by Mr. Swezey on *Pritchardia*, Mt. Olympus, Oahu. It is well known to be polyphagous. Several other specimens were taken by him from *Euphorbia* in Manoa Valley. These are of the paler form, and hardly differ from slightly faded examples of var. *chryseis*. One of the males is much larger than the other. I have great doubt whether *P. minimus* is more than a depauperated form of this same species.

NOTES AND EXHIBITIONS.

Clerid beetle.—Mr. Pemberton exhibited specimens of a species of Cleridae taken by him on dead wood of Monkey-pod tree (*Samanea saman*) brought to the Experiment Station, H. S. P. A., from their forestry nursery near Vineyard Street and Nuuanu. The species is apparently a previously unrecorded immigrant.

Bostrychid beetle.—Mr. Bridwell exhibited specimens of an undetermined Bostrychid taken from a packing case in which cigars had been imported from Manila. The species does not seem to have become established. Mr. Ehrhorn recalled taking a beetle under similar conditions, and examination of specimens showed this to be the same species. The box was made of a native Philippine wood which Mr. J. F. Rock considered as probably a species of tropical cedar. A general discussion of the introduction of insects in commerce other than those articles subject to plant quarantine inspection followed.

Celerio sp.*—Mr. Bryan exhibited a specimen of an undescribed endemic species of the Sphingid genus *Celerio* taken by him on the ascent from Manoa Valley to Panoa Flats, Oahu, October 5th, 1919. The only specimens of this species heretofore known are a very much rubbed specimen taken by Mr. Swezey at Palolo Crater, September 3rd, 1906, and another very much deformed specimen bred by Mr. Swezey

*Described on page 379 as *Celerio perkinsi*. (Ed.)